

SAFETY ELEMENT

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I. INTRODUCTION

California law requires that a Safety Element be prepared as part of a city's General Plan, as follows:

Government Code Section 65302(g): A safety element for the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence and other geologic hazards known to the legislative body; flooding; and wild land and urban fires. The safety element shall include mapping of known seismic and other geologic hazards. It shall also address evacuation routes, peak load water supply requirements and minimum road width and clearances around structures, as those items relate to identified fire and geologic hazards

As required by State law, the Safety Element identifies forces of nature and events resulting from human action that have the potential for causing significant harm to life and property in the City of Laguna Woods. Identification of sources of such threats allows decision makers to take preemptory action to minimize the damage, particularly as relates to new development projects.

In addition to state-mandated components, the Safety Element recognizes a heightened awareness of personal safety issues among many in the City of Laguna Woods community. In response to participants' comments in Community Workshops, the Safety Element includes consideration of personal safety and emergency medical services issues.

The Safety Element is organized into two sections:

Policy Document

The Policy Document identifies a course of action for minimizing the risks to life and property in the event that disasters caused by forces of nature or human action occur in the City of Laguna Woods. The course of action is defined through a series of "Objectives", "Policies", and "Implementation Measures."

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Objectives are broad statements about the community's expectations about city government's role and future direction in matters germane to the Safety Element.

Policies suggest possible strategies for achieving results consistent with each Objective articulated in the Safety Element. Implementation Measures are specific, discreet actions to be taken as part of the strategy for minimizing harm to life and property that could result from natural or human-caused disasters.

Background Report

The Background Report includes the *Current Setting* section that describes known threats to the City of Laguna Woods posed by both natural and manmade environmental hazards.

The *Issues, Opportunities, and Constraints* section lists those factors that shaped the future-oriented Policy Document of the Safety Element. *Issues, Opportunities, and Constraints* reflect input from participants in a series of General Plan community workshops, and the considerations likely to influence preparations for and responses to environmental hazards.

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II. POLICY DOCUMENT

The Policy Document provides direction for planning for both natural and man made disasters, and for a course of action in advance of such events to minimize the potential for harm to people and property.

Objective I: Maintain and enhance the existing sense of security of residents.

Policy I.A: Provide the highest levels of police, fire, and paramedic services as are available and fiscally feasible.

Implementation

Measure:

- I.A.1 Review on an annual basis police, fire, and emergency medical response times in the City of Laguna Woods to ensure that they meet or exceed industry standards.
- I.A.2 Work with adjoining cities to achieve economies of scale in deployment of sheriff's patrol and detective units.
- I.A.3 Work with the Orange County Sheriff's Department in offering crime prevention and reporting programs including Neighborhood Watch to residents and businesses.

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Objective II: Plan for the unique personal safety concerns within the community.

Policy II.A Consider providing technical and organizational support for seniors' programs promoting a safe and secure environment for independent living.

Implementation Measure:

II.A.1 Consider programs such as an information and referral hotline and low-cost emergency alert systems for individuals.

II.A.2 Involve the Orange County Fire Authority with the community in educational programs about emergency medical response including cardio-pulmonary resuscitation training.

II.A.3 Consider joint ventures with other organizations to provide social services to residents.

Objective III. Prepare for disasters including earthquakes and flooding.

Policy III.A. City government will assume the leadership role in preparation for and response to disasters at the local level.

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Implementation Measure:

- III.A.1 Prepare an Emergency Operations Plan including provisions for setting up an Emergency Operations Center.
- III.A.2 Arrange mutual aid pacts for disaster recovery services including building and infrastructure damage assessment.
- III.A.3 Inform residents and businesses about disaster preparedness and response at the local level.
- III.A.4 Inform property owners of the availability of maps showing local areas particularly susceptible to seismic and flooding hazards.
- III.A.5 Work with property owners in identifying measures to mitigate potential property damage from seismic and flooding hazards.

Objective IV. Address transportation-related safety concerns.

Policy IV.A Identify hazards related to vehicular use and take appropriate corrective actions.

Implementation Measure:

- IV.A.1 Work with the Sheriff's Department to identify roadway segments and intersections with higher than expected accident rates and implement appropriate preventive measures including radar-assisted speed enforcement and vehicle speed display boards.

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IV.A.2 Disseminate pertinent California Vehicle Code regulations including drivers' licensing requirements and restrictions on uses of alternative modes of transportation on public streets.

IV.A.3 Work with the Sheriff's Department and community organizations in providing refresher courses for senior drivers.

III. BACKGROUND REPORT

A. Current Setting

Geologic/Seismic Hazards

In 1972, the State legislature passed the Alquist-Priolo Earthquake Fault Zoning Act requiring the State Division of Mines and Geology to map areas most susceptible to surface fault rupture during an earthquake (Alquist-Priolo Zones). Although no such zones were identified in the City of Laguna Woods, the City could experience significant property damage and loss of life as a result of an earthquake along any of several faults underlying southern California.

Seismic activity on any of four known faults would likely affect the City of Laguna Woods (Exhibit S-1). The closest of these is the offshore Newport-Inglewood Fault Zone that follows the Orange County coastline approximately six miles to the southwest of the City of Laguna Woods. The Elsinore, San Andreas, and San Jacinto Faults represent similar risks. The Elsinore system parallels the Santa Ana Mountains through Riverside and San Diego Counties northeast of the City of Laguna Woods. The San Andreas Fault trends in a southeasterly to northwesterly direction through central Riverside County and southwestern San Bernardino County. The San Jacinto Fault parallels and lies midway between the San Andreas and Elsinore Faults.

In addition to strong ground motion associated with an earthquake on one of the identified fault zones, the City of Laguna Woods is susceptible to the earthquake-induced hazards of landslides and liquefaction. Liquefaction occurs when strong ground shaking, in the presence of a high groundwater table and certain sedimentary soils, turns the ground into a liquid. Landslides result from seismically induced fractures of underlying bedrock.

Areas in the City of Laguna Woods subject to earthquake-induced landslides and liquefaction as identified by the California Division of Mines and Geology are shown in Exhibit S-2. Neither tsunamis (seismically-induced waves) nor seiches (seismically-induced flooding from lakes or bays) are a threat to the City of Laguna Woods: the barrier islands protect mainland southern California from tsunamis; settings

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typically associated with seiche i.e. boulder-lined alpine lakes do not exist in the area.

Exhibit S - 1: Earthquake Fault Zones

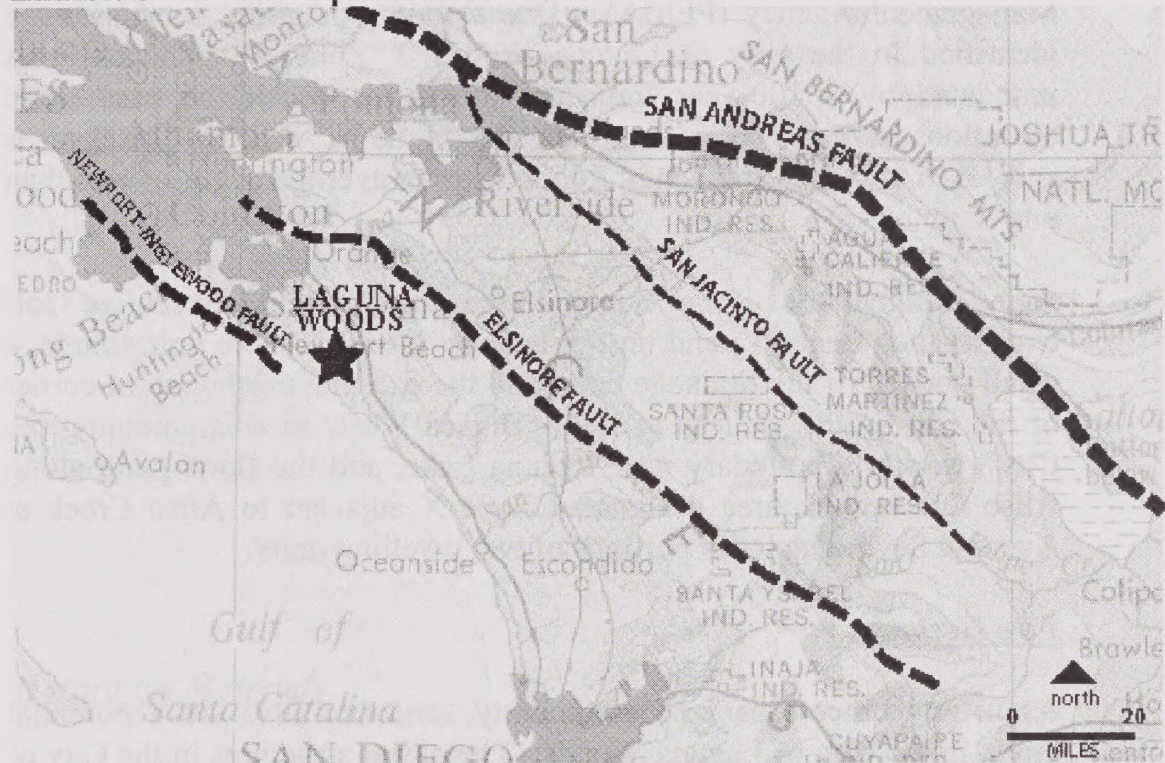
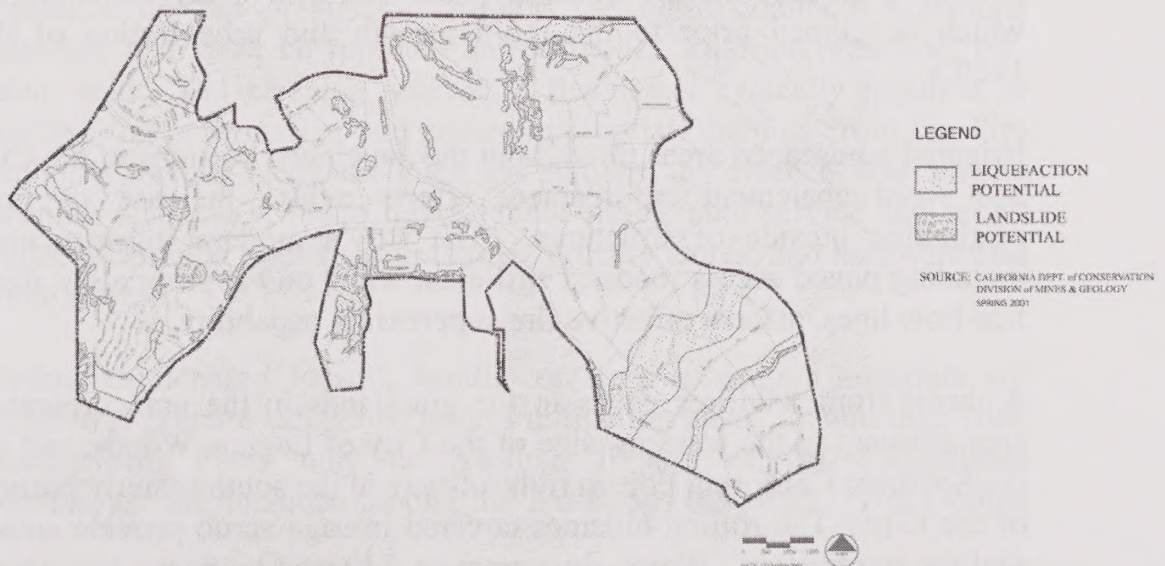


Exhibit S - 2: Seismic Hazards



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Flood Hazards

Areas subject to flood hazard are represented on the Flood Insurance Rate Maps (Exhibit S-3) prepared by the Federal Emergency Management Agency (FEMA). Two flooding potential categories are identified in the City of Laguna Woods: “Zone A” includes areas inundated by a 100-year frequency flood for which the base flood elevations have not been identified; and “Zone X” which includes areas subject to 100-year frequency floods with an average depth of less than one foot.

Areas designated as Zone A include the Leisure World Executive Golf Course, the retention pond on the Leisure World 27-hole golf course, a small portion of the drainage course in the extreme northwestern corner of the City in the vicinity of Bahia Blanca West, an area adjoining the City’s westerly boundary near Laguna Lake, and the flood plain along Aliso Creek. An area designated Zone X adjacent to Aliso Creek at Avenida Sevilla includes portions of two dwelling units.

Fire Hazards

As in any other urbanized community, structure fires are a potential threat in the City of Laguna Woods. The oldest structures in the City of Laguna Woods date back only to the mid-1960’s. Structures in the City of Laguna Woods conform to building and fire safety standards, including those for building separation and emergency access, that provide a broader margin of safety than found in many communities which developed prior to the rapid growth and urbanization of the 1950’s.

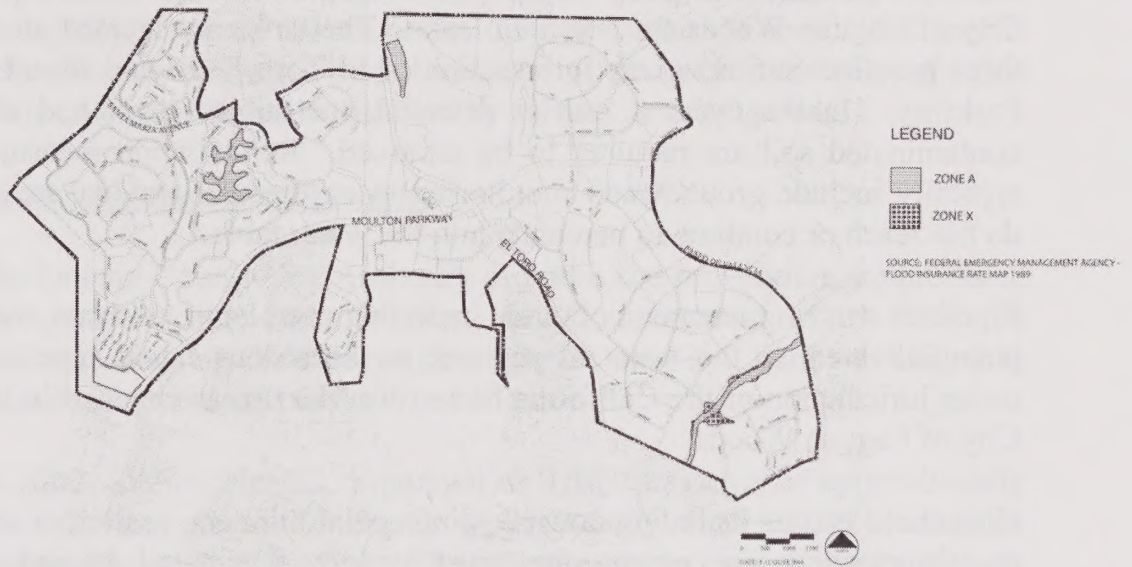
Irrigated landscaped areas throughout the developed portions of the City and weed abatement enforcement efforts reduce the risk of fires originating outside of structures. The City’s modern infrastructure, including paved access roads of sufficient width and appropriately sized fire-flow lines, affords effective fire suppression capability.

A threat from wildfires exists in the grasslands in the unincorporated area adjacent to the western edge of the City of Laguna Woods, and on the Southern California Edison right-of-way in the southwesterly portion of the City. The rolling hillsides covered in sage scrub provide ample fuel for combustion. Warm, dry summers followed by Santa Ana winds

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in late fall exacerbate the potential for wildland fires such as those in Laguna Beach in 1993 that started in the eastern slopes of the San Joaquin Hills near the City of Laguna Woods.

Exhibit S - 3: Flood Hazard Zones



Hazardous Materials

Businesses that use, store, or handle hazardous materials are required to report the names and quantities of those substances to the Orange County Fire Authority pursuant to Federal, State, and County laws. Reporting requirements are determined by the quantities of each substance on the premises. Among the more common hazardous materials that must be reported are pesticides, chlorine, gasoline, ink, paint, acids, and cleaning solvents. Businesses typically required to disclose this information and secure appropriate permits from the Fire Authority include medical clinics, gas stations, dry cleaners with on-site cleaning machinery, photo development shops, auto service and repair shops, swimming pool supplies stores, grocery stores, and hardware and home stores.

Businesses licensed to sell, handle, or store hazardous materials are required to prepare safety and hazard mitigation plans. In addition, Risk Management Plans may be required if any of 260 "Regulated Substances" are included among the hazardous materials. The Orange

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County Fire Authority routinely inspects facilities licensed to house hazardous materials.

Leaking underground storage tanks at gasoline stations are a common source of release of hazardous materials into the soil. The Orange County Health Care Agency monitors underground storage tanks in the City of Laguna Woods for potential leaks. The tanks are located at the three gasoline stations at the intersection of El Toro Road and Moulton Parkway. In the event a leak is detected, the subject tank and any contaminated soil are required to be removed. Remediation measures typically include groundwater monitoring to ensure that residual toxins do not reach or continue to percolate into the water table.

Pipelines carrying hazardous liquids including petroleum products are a potential threat in the event of rupture; no hazardous liquid pipelines under jurisdiction of the California State Fire Marshal are located in the City of Laguna Woods.

Household wastes including unused paints, paint thinners, pesticides and caustic cleaners are among the most widely distributed hazardous substances. Disposal of these materials with other household wastes destined for landfills poses the threat of significant soils and groundwater contamination at the dumpsite.

Nuclear Hazard

The San Onofre Nuclear Generating Station is located adjacent to the I-5 Freeway in San Diego County just south of the Orange County line. The facility is approximately 18 miles from the City of Laguna Woods. The U.S. Nuclear Regulatory Commission (NRC) has identified the area surrounding every nuclear generating station as an Emergency Planning Zone. All areas within 50 miles of a nuclear generating station are deemed Ingestion Pathway Zones. All of Orange County falls within the Ingestion Pathway Zone for San Onofre.

The State of California has defined the area outside and adjacent to the Emergency Planning Zone for San Onofre as a Public Education Zone. The City of Laguna Woods is within the Public Education Zone. Information about the nuclear generating station may be distributed periodically to all residential properties located within the Public Education Zone.

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B. Emergency Response

Police

The City of Laguna Woods contracts with the Orange County Sheriff's Department for law enforcement, which includes routine patrol and emergency response for all of the City of Laguna Woods. The sheriff substation serving the City is located at 11 Journey in the City of Aliso Viejo. Leisure World is patrolled by private security guards.

Fire and Hazardous Materials

The Orange County Fire Authority provides fire prevention, suppression, and paramedic services. Station No. 22, located at 24001 Paseo de Valencia, housing three fire engines, serves the City. Each working shift includes four firemen and two paramedics.

In 2000, Station No. 22 responded to 3,563 incidents or approximately ten calls per day. Of these, approximately 85% (3,005) were for emergency medical services. The target response time of five minutes is met 80 percent of the time, and all responses are made within eight minutes. Emergency back-up service is provided from Station No. 19, located at 23022 El Toro Road in Lake Forest, and from Station No. 39, located at 24241 Avila Road in Laguna Niguel.

Medical Care

Saddleback Memorial Medical Center is the hospital nearest to the City of Laguna Woods and is located at the northwest corner of Paseo de Valencia and Health Center Drive in Laguna Hills. Mission Medical Center on Crown Valley Parkway in Mission Viejo and Irvine Regional Hospital and Medical Center on Sand Canyon Drive in Irvine also serve the City of Laguna Woods community. Saddleback, Mission and Irvine Regional provide emergency room facilities. Mission Medical center is the area's designated trauma center.

Flood

The Orange County Public Facilities and Resources Department activates the Storm Operations Center when heavy rainfall is predicted

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or occurs, or when storm run-off is expected to cause local flooding. As needed, emergency personnel and equipment are dispatched to flood control facilities such as Aliso Creek.

Nuclear Emergency Response

In the event of an accident involving radioactive materials at the San Onofre Nuclear Generating Station, the United States Nuclear Regulatory Commission, the Federal Emergency Management Agency, and the California Department of Emergency Services will coordinate emergency response activities. The Interjurisdictional Planning Committee (IPC) coordinates local emergency response. The IPC is comprised of representatives from governmental entities in close proximity to the Station including Orange County.

Disaster Response

The Emergency Management Division of the Orange County Sheriff's Department coordinates with cities within the county to prepare, update and implement the County Multihazard Functional Plan. The Plan outlines the responsibilities of each jurisdiction in the event of a natural hazard. In addition, the Plan designates emergency routes throughout the County.

C. Issues, Opportunities, and Constraints

This section highlights the key considerations that shaped the Safety Element as a guide for future action by the City in the areas of public safety including police and fire protection, emergency services, and disaster preparedness and response. The information represents a compilation of input from participants at community workshops and background data collected by planning staff.

1. ISSUES

a. Crisis and Emergency Services Information

The need for crisis and emergency services is greater among senior citizens than in the general population. Community members expressed interest in informational guides to emergency medical services and

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alternative means for alerting emergency service responders in a medical crisis. Specific suggestions to meet these needs included creation of a 24-hour senior and information line, affordable Life Alert transmitters, and a City department for senior safety and welfare.

b. Personal Safety

Workshop participants stressed that personal safety is of greater concern to senior citizens than to other age groups. Residents agreed that the sense of security is a primary reason for choosing to live in the City of Laguna Woods. A need for security patrols in parking lots, and at park and ride facilities was indicated. Other suggested means to enhancing personal safety included improved street lighting and the organization of volunteer foot patrols and horseback patrols.

c. Vehicular Hazards

Community members perceive a significant threat to pedestrians and other motorists from large numbers of drivers exceeding the speed limit. A preponderance of residents without valid licenses who continue to drive in the City of Laguna Woods was identified as a significant problem. A need for greater awareness of rules governing golf cart use was indicated.

d. Seismic Risk

The California Division of Mines and Geology has identified areas in the City of Laguna Woods susceptible to the seismically induced hazards of liquefaction and landslides.

2. OPPORTUNITIES

a. Low Crime Rate

Crime statistics from the Orange County Sheriff's Department indicate that the City of Laguna Woods has the lowest crime rate of any jurisdiction within Orange County. Resources not required for police services such as youth intervention and gang suppression programs may be directed toward alternative programs for the senior citizen population of the City of Laguna Woods.



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b. Retiree Population

The significant number of retirees in the City of Laguna Woods population provides a large pool of potential volunteers for crime prevention programs such as Neighborhood Watch.

3. CONSTRAINTS

a. Limited City Resources

Restrictions on revenue sources available to local governments limits the number and scope of safety-related programs the City can offer.

b. Residents on Fixed Income

A significant number of retirees in the City of Laguna Woods may be unable to pay for special medical emergency or crisis services.

c. Sheriff's Department cannot enforce traffic laws within Leisure World

All streets within Leisure World are private and the City cannot authorize the Sheriff's Department to enforce traffic laws inside the gates.

D. Data Sources

Information used in preparation of the Safety Element was obtained from sources including: Orange County Sheriff's Department, Orange County Fire Authority, the City of Laguna Woods, the Federal Emergency Management Agency, the California State Fire Marshal, the California Division of Mines and Geology, and the County of Orange Department of Public Facilities and Resources